



DEPARTMENT OF THE TREASURY

Federal Insurance Office Request for Information on the Insurance Sector and Climate-Related Financial Risks

AGENCY: Federal Insurance Office, Departmental Offices, Department of the Treasury.

ACTION: Request for Information.

SUMMARY: The Federal Insurance Office (FIO) of the U.S. Department of the Treasury (Treasury) is issuing this Request for Information (RFI), following the May 20, 2021 Executive Order on Climate-Related Financial Risk, to solicit public input on FIO's future work relating to the insurance sector and climate-related financial risks. FIO's efforts will focus on three initial climate-related priorities, which are described below. Additionally, this RFI seeks input on how FIO's data collection and dissemination authorities can best be used by FIO in support of these priorities, as well as to monitor and assess the insurance sector and climate-related financial risks.

DATES: Submit written comments on or before **[INSERT DATE THAT IS 75 DAYS AFTER PUBLICATION IN THE FEDERAL REGISTER]**.

ADDRESSES: Submit comments electronically through the Federal eRulemaking Portal at <http://www.regulations.gov>, in accordance with the instructions on that site, or by mail to the Federal Insurance Office, Attn: Elizabeth Brown, Senior Insurance Regulatory Policy Analyst, Elizabeth.Brown@treasury.gov, (202) 597-2869, Room 1410 MT, Department of the Treasury, 1500 Pennsylvania Avenue NW, Washington, DC 20220. Because postal mail may be subject to processing delays, it is recommended that comments be submitted electronically. If submitting comments by mail, please submit an original version with two copies. Comments should be captioned "FIO Insurance Sector and Climate-Related Financial Risks." In general, Treasury will post all comments to www.regulations.gov without change, including any business or

personal information provided such as names, addresses, email addresses, or telephone numbers.

All comments, including attachments and other supporting materials, are part of the public record and subject to public disclosure. You should submit only information that you wish to make available publicly.

FOR FURTHER INFORMATION CONTACT: Steven Seitz, Director, Federal Insurance Office, Steven.Seitz@treasury.gov, (202) 531-0915; Stephanie Schmelz, Deputy Director, Stephanie.Schmelz@treasury.gov, (202) 341-5258; Elizabeth Brown, Senior Insurance Regulatory Policy Analyst, Elizabeth.Brown@treasury.gov, (202) 597-2869 or Bret Howlett, Senior Insurance Regulatory Policy Analyst, Bret.Howlett@treasury.gov, (202) 570-3916.

Persons who have difficulty hearing or speaking may access these numbers via TTY by calling the toll-free Federal Relay Service at (800) 877-8339.

SUPPLEMENTARY INFORMATION:

Background

The Insurance Sector and Climate-Related Financial Risks

The Intergovernmental Panel on Climate Change (IPCC) reported this year that “[h]uman-induced climate change is already affecting many weather and climate extremes in every region across the globe. Evidence of observed changes in extremes such as heatwaves, heavy precipitation, droughts, and tropical cyclones, and, in particular, their attribution to human influence, has strengthened since [2013].”¹ The United States has experienced a dramatic increase in the frequency and severity of climate-related disasters with a corresponding increase

¹ IPCC, *Climate Change 2021: The Physical Science Basis - Summary for Policymakers*, 7 August 2021, SPM-10, https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM.pdf.

in economic losses in the past 40 years.² Economic growth combined with changing socioeconomic trends, such as urbanization and the migration patterns to areas at higher risk of climate-related disasters, are increasing the financial risks associated with the effects of climate change. The increased frequency and severity of climate-related disasters, as well as the magnitude of associated insured losses, highlight the significance of these climate-related financial risks and the role of insurers in responding to them.³ Additionally, some insurance consumers are increasingly unable to find affordable and available property insurance coverage in certain insurance markets.⁴

The impact of climate change also affects insurers through their broader role in financial markets. For example, the U.S. life insurance sector is one of the largest investors in the U.S. capital markets, with over \$4.7 trillion in investments held in general accounts at year-end 2020.⁵ As owners of significant amounts of assets, insurers could be vulnerable to potential decreases in asset values arising from the transition towards a low-carbon economy.⁶

More broadly, climate-related financial risks may present challenges to the stability of the financial system (of which the insurance sector is an important part) including as shocks that

² See, e.g., Adam B. Smith, “2010-2019: A Landmark Decade of U.S. Billion-Dollar Weather and Climate Disasters,” *NOAA Climate.gov Blog*, January 8, 2020, <https://www.climate.gov/news-features/blogs/beyond-data/2010-2019-landmark-decade-us-billion-dollar-weather-and-climate>.

FIO is using the term “climate-related disasters” to refer to the type of weather-related events (such as wildfires, floods, hurricanes, etc.) that may be produced or exacerbated by climate change, as distinct from non-weather related, natural events (such as earthquakes and tsunamis).

³ Aon, *Weather, Climate & Catastrophe Insight Annual Report 2020* (2021), 9, https://www.aon.com/global-weather-catastrophe-natural-disasters-costs-climate-change-2020-annual-report/index.html?utm_source=region&utm_medium=africa&utm_campaign=natcat21 (*Aon 2020 Cat Insight Annual Report*).

⁴ See, e.g., Christopher Flavelle, “Wildfires Hasten Another Climate Crisis: Homeowners Who Can’t Get Insurance,” *New York Times*, September 2, 2020, <https://www.nytimes.com/2020/09/02/climate/wildfires-insurance.html>; Emma Kerr, “Here’s How You’re Already Paying for Climate Change,” *U.S. News & World Report*, June 10, 2021, <https://money.usnews.com/money/personal-finance/spending/articles/heres-how-youre-paying-for-climate-change>.

⁵ *Best’s Special Report: First Look: 12 Month 2020 Life/Annuity Financial Results* (March 23, 2021), <https://www.businesswire.com/news/home/20210323005711/en/Best%E2%80%99s-Special-Report-U.S.-LifeAnnuity-Industry%E2%80%99s-Net-Income-Cut-Nearly-in-Half-in-2020>.

⁶ New York Department of Financial Services, *An Analysis of New York Domestic Insurers’ Exposure to Transition Risks and Opportunities from Climate Change* (June 10, 2021), https://www.dfs.ny.gov/system/files/documents/2021/06/dfs_2dii_report_ny_insurers_transition_risks_20210610.pdf

increase financial system vulnerabilities. In a 2020 report, the Financial Stability Board (FSB) described climate-related risks as falling into three categories:

- Physical risks are “the possibility that the economic costs of the increasing severity and frequency of climate-change related extreme weather events, as well as more gradual changes in climate, might erode the value of financial assets, and/or increase liabilities.”⁷
- Transition risks can arise from the technological, market, and policy changes needed to adjust to a low carbon economy and their effects on the value of financial assets and liabilities. Depending on the nature, speed, and focus of these changes, transition risks may pose varying levels of financial and reputational risk to organizations.⁸
- Liability risks may “arise when parties are held liable for losses related to environmental damage that may have been caused by their actions or omissions.”⁹

The same FSB report described how these risks might affect financial stability and highlighted the potential for new risks introduced from the response of the global financial system to climate-related shocks.¹⁰

An assessment of how climate-related financial risks may affect the insurance sector should consider physical risks, transition risks, and liability risks. More specifically, the assessment should include how the life and property & casualty (P&C) insurers’ business models (including their underwriting activities, market activities, and investment activities) are affected by each category of risk.¹¹

The lack of available data complicates the ability to conduct such assessments.

Government and private sector stakeholders have noted the significant issues caused by the lack

⁷ FSB, *The Implications of Climate Change for Financial Stability* (November 23, 2020), 4, 16, <https://www.fsb.org/wp-content/uploads/P231120.pdf> (FSB *Climate Change Implications Report*).

⁸ See FSB *Climate Change Implications Report*; Task Force on Climate-Related Financial Disclosures, *Recommendations of the Task Force on Climate-related Financial Disclosures* (June 15, 2017), 13, <https://www.fsb-tcfd.org/publications/final-recommendations-report/>.

⁹ FSB *Climate Change Implications Report*.

¹⁰ FSB *Climate Change Implications Report*, 1.

¹¹ See, e.g., FSB *Climate Change Implications Report*, 23 (noting that, if the materialization of climate related risks were to lead to large increases in insured losses from physical risks, this might reduce the degree to which households and companies could insure against these risks).

of available data to assess climate-related financial risk within the insurance sector.¹² These stakeholders could all potentially benefit from high-quality, consistent, comparable, and reliable data for their risk management, disclosures, and forward plans to assess and address climate-related financial risks. State regulatory tools, such as the Own Risk and Solvency Assessment (ORSA), may capture data on some climate-related financial risks if they are recognized by a reporting insurer as having a material impact on its solvency over the next one to two years, but these tools may be inadequate to assess climate-related risks, particularly over a longer time horizon. Additionally, only six states have regularly collected from insurers certain limited, high-level qualitative data directly focused on climate-related financial risks.¹³ No federal authority is collecting climate-related financial data specific to the insurance sector.

Executive Orders

The President's May 20, 2021, Executive Order on Climate-Related Financial Risk emphasizes the important role that the insurance sector can play in combatting climate change. It instructs the Secretary to task FIO "to assess climate-related issues or gaps in the supervision and regulation of insurers, including as part of the [Financial Stability Oversight Council] FSOC's analysis of financial stability, and to further assess, in consultation with States, the potential for major disruptions of private insurance coverage in regions of the country particularly vulnerable to climate change impacts."¹⁴

¹² FSB *Climate Change Implications Report*, 28; FSB and International Monetary Fund, *The Financial Crisis and Data Gaps: G20 Data Gaps Initiative (DGI-2) The Fifth Progress Report — Countdown to 2021 in Light of COVID-19* (October 2020), 7, <https://www.fsb.org/wp-content/uploads/P071020.pdf>; International Association of Insurance Supervisors and Sustainable Insurance Forum, *Application Paper on the Supervision of Climate-related Risks in the Insurance Sector* (May 2021), 9, 12-13, 28, <https://www.iaisweb.org/page/supervisory-material/application-papers/file/97146/application-paper-on-the-supervision-of-climate-related-risks-in-the-insurance-sector#>; "How Insurance Companies Can Prepare for Risk from Climate Change," Deloitte, <https://www2.deloitte.com/us/en/pages/financial-services/articles/insurance-companies-climate-change-risk.html>.

¹³ National Association of Insurance Commissioners (NAIC) Center for Insurance Policy and Research, *Assessment of and Insights from NAIC Climate Risk Disclosure Data* (November 2020), 5-6, <https://content.naic.org/sites/default/files/cipr-report-assessment-insights-climate-risk-data.pdf>. The six states—California, Connecticut, Minnesota, New Mexico, New York, and Washington—use the Insurer Climate Risk Disclosure Survey developed by the NAIC. The states require survey completion only by insurers that are regulated by them and who annually report \$100 million or more in premiums and annuity considerations.

¹⁴ Exec. Order No. 14,030 § 3(b)(i), 86 Fed. Reg. 27967 (May 20, 2021), <https://www.federalregister.gov/documents/2021/05/25/2021-11168/climate-related-financial-risk>.

The May 20 Executive Order complements the President’s January 27, 2021 Executive Order on Tackling the Climate Crisis at Home and Abroad, which set forth the Administration’s policy to “organize and deploy the full capacity of its agencies to combat the climate crisis to implement a Government-wide approach.” The President’s January 27 Executive Order puts the climate crisis at the center of U.S. foreign policy and national security and seeks to “put the United States on a path to achieve net-zero emissions, economy-wide, by no later than 2050.”¹⁵

FIO’s Authorities

Title V of the Dodd-Frank Wall Street Reform and Consumer Protection Act established FIO within Treasury. FIO’s statutory authorities include, among other things, monitoring all aspects of the insurance sector, including identifying issues or gaps in the regulation of insurers that could contribute to a systemic crisis in the insurance sector or the U.S. financial system. FIO’s authorities also include monitoring the availability and affordability of insurance products for traditionally underserved communities and consumers, minorities, and low- and moderate-income persons.¹⁶ These segments of the population may be negatively and disproportionately impacted by climate change.¹⁷

In addition, FIO is authorized to collect data and information on and from the insurance sector, including through the use of subpoenas.¹⁸ FIO is also authorized to analyze and disseminate data and information and issue reports on all lines of insurance, except health insurance.¹⁹

Because climate change is a global phenomenon, FIO’s international insurance statutory authorities can help achieve U.S. goals in this area. FIO is authorized to coordinate federal

¹⁵ Exec. Order No. 14,008 § 201, 86 Fed. Reg. 7619 (January 27, 2021), <https://www.federalregister.gov/documents/2021/02/01/2021-02177/tackling-the-climate-crisis-at-home-and-abroad>.

¹⁶ 31 U.S.C. 313(c)(1)(A)-(B).

¹⁷ See, e.g., Alexa Jay et al., “Overview,” in *Impacts, Risks and Adaptation in the United States: Fourth National Climate Assessment* (2018), 36, https://nca2018.globalchange.gov/downloads/NCA4_Ch01_Overview.pdf.

¹⁸ 31 U.S.C. 313(e)(6).

¹⁹ 31 U.S.C. 313(e)(1).

efforts and develop federal policy on prudential aspects of international insurance matters, including representing the United States, as appropriate, in the International Association of Insurance Supervisors (IAIS).²⁰ Finally, the FIO Director also serves as a non-voting member of the FSOC.²¹ The May 20 Executive Order directs that FIO contribute to FSOC's analysis of financial stability related to climate change.²²

FIO's Current Engagement on Climate-Related Issues

FIO's role and statutory authorities enable it to take a leadership position in analyzing how the insurance sector may be impacted by, and help mitigate, climate-related risks. FIO is engaging with the NAIC and state insurance regulators through their work on climate-related topics.²³ FIO also represents the United States at the IAIS, is a member of the UN's Sustainable Insurance Forum, and is a member of the Organisation of Economic Cooperation and Development's Insurance and Private Pensions Committee—all of which are increasingly focused on climate-related issues. In addition, FIO is discussing climate-related issues with insurance authorities in both the United States and the European Union through the EU-U.S. Insurance Project. FIO also represents Treasury in the federal Mitigation Framework Leadership Group, which is a national structure to coordinate disaster mitigation efforts across the federal government and with state, local, tribal, and territorial representatives. FIO is engaging with the Securities and Exchange Commission and other members of the FSOC on climate-related financial risks. More generally, FIO provides insurance expertise and technical assistance within Treasury and to other federal agencies, including to the Federal Emergency Management Agency in connection with the National Flood Insurance Program (NFIP). FIO's engagement on climate-related issues also includes the issuance of public reports addressing natural disasters,

²⁰ 31 U.S.C. 313(c)(1)(E).

²¹ 12 U.S.C. 5321(b)(2)(B).

²² Exec. Order No. 14,030 § 3(b)(i).

²³ See, e.g., David Altmaier, Presidential Address (speech, NAIC Spring 2021 Opening Session, April 12, 2021), https://content.naic.org/article/notice_spring_2021_opening_session_prepared_remarks.htm.

climate change, and insurance, including through its annual report to Congress and the President.²⁴

FIO's Initial Climate-Related Priorities

FIO intends for its climate-related work to respond not only to the Executive Orders, but also to provide an insurance-specific focus within Treasury's broader climate work, including working with Treasury's Climate Hub.²⁵ In particular, FIO intends to initially focus on the following three climate-related priorities:

1. Insurance Supervision and Regulation: Assess climate-related issues or gaps in the supervision and regulation of insurers, including their potential impacts on U.S. financial stability.

Maintaining the financial stability of the insurance sector will involve identifying and filling gaps (if any) in insurance supervision with a focus on assessing climate-related financial risks. This will include monitoring the integration of climate-related financial risks into insurance supervisory practices and regulatory frameworks, as well as assessing whether sufficient data, methodologies, and tools exist to manage the solvency of insurers and to protect them against the long-term risk of climate change. To that end, FIO plans to assess supervisory practices and resources, including but not limited to examination policies and procedures, solvency assessment and techniques, data availability and integrity, public disclosures, modeling, and forward-looking assessments (e.g., scenario analysis, stress testing). FIO will consult with

²⁴ See, e.g., FIO, *Report Providing an Assessment of the Current State of the Market for Natural Catastrophe Insurance in the United States* (2015), <https://home.treasury.gov/system/files/311/Natural%20Catastrophe%20Report.pdf>. See also "Reports and Notices," FIO, <https://home.treasury.gov/policy-issues/financial-markets-financial-institutions-and-fiscal-service/federal-insurance-office/reports-notice> (providing links to all FIO Annual Reports and other reports).

²⁵ See U.S. Department of the Treasury, "Treasury Announces Coordinated Climate Policy Strategy with New Treasury Climate Hub and Climate Counselor," news release, April 19, 2021, <https://home.treasury.gov/news/press-releases/jy0134>.

individual state insurance regulators and the NAIC during its assessment of such supervisory practices and resources.

2. Insurance Markets and Mitigation/Resilience: Assess the potential for major disruptions of private insurance coverage in U.S. markets that are particularly vulnerable to climate change impacts; facilitate mitigation and resilience for disasters.

Growing evidence indicates that climate change may be associated with a decline in the availability and affordability of insurance provided by the private sector (i.e., private insurance coverage) in certain markets.²⁶ The creation and expansion of insurers of last resort by individual U.S. states and the federal government highlights this problem.²⁷ FIO intends to examine the insurability of disasters that are produced or exacerbated by climate change, including wildfires, hurricanes, floods, wind damage, and extreme temperatures.

Additionally, traditionally underserved communities and consumers, minorities, and low- and moderate-income persons may have disproportionate challenges in obtaining affordable property insurance to cover the risks posed by climate-related disasters; further declines in available and affordable insurance could exacerbate the inequities that these persons face.²⁸ This situation underscores the need to identify solutions to address the growing protection gap exacerbated by climate change.²⁹ Therefore, FIO also intends to assess the availability and

²⁶ See, e.g., FIO, *Annual Report on the Insurance Industry* (September 2020), 59-60, <https://home.treasury.gov/system/files/311/2020-FIO-Annual-Report.pdf>. See also Exec. Order No. 14,030 § 3(b)(i) (directing FIO to assess “the potential for major disruptions of **private insurance coverage** in regions of the country particularly vulnerable to climate change impacts” as distinct from insurance provided by or backed by a government entity, such as the federal NFIP. (emphasis added)).

²⁷ See, e.g., “California FAIR Plan Property Insurance,” <https://www.cfpnet.com>; “About Us: Who We Are,” Citizens Property Insurance Corporation, <https://www.citizensfla.com/who-we-are>; Congressional Research Service, *Introduction to the National Flood Insurance Program (NFIP)*, Report No. R44593 (Jan. 5, 2021), 1, <https://fas.org/sgp/crs/homsec/R44593.pdf>.

²⁸ See, e.g., Rachel Morello-Frosch, et al., *The Climate Gap: Inequalities in How Climate Change Hurts Americans & How to Close the Gap* (2018), 17, https://dornsife.usc.edu/assets/sites/242/docs/ClimateGapReport_full_report_web.pdf.

²⁹ See, e.g., *Aon 2020 Cat Insight Annual Report*; Federal Advisory Committee Protection Gap Subcommittee, *Addressing the Protection Gap Through Public/Private Partnerships & Other Mechanisms*, (December 5, 2019), https://home.treasury.gov/system/files/311/December2019FACI_ProtectionGapPresentation.pdf; ACPR, *A First Assessment of Financial Risks Stemming from Climate Change: The Main Results of the 2020 Climate Pilot Exercise*, No. 122-2021 (2021), 60, https://acpr.banque-france.fr/sites/default/files/medias/documents/20210602_as_exercice_pilote_english.pdf.

affordability of insurance coverage in high-risk areas, particularly for traditionally underserved communities and consumers, minorities, and low- and moderate-income persons.

Beyond analyzing potential insurance market disruptions, FIO intends to look at solutions, including identifying best practices for mitigation that can then increase post-disaster resilience, including solutions that can help ensure sufficient availability and affordability of insurance for consumers in light of increasing climate-related disaster risk. In addition, FIO will examine the role of insurers in supporting climate resilience in critical infrastructure, as well as in supporting green investment initiatives.

3. Insurance Sector Engagement: Increase FIO’s engagement on climate-related issues; leverage the insurance sector’s ability to help achieve climate-related goals.

FIO plans to increase its engagement on climate-related issues and take a leadership role in analyzing how the insurance sector may help mitigate climate-related risks. Throughout this work, FIO will engage with stakeholders, including through this RFI. Additionally, the insurance sector has the ability to shape industries, products, and practices through its functions in the financial markets and broad understanding of risk. Thus, it can influence climate-related activity of other sectors of the U.S. economy. FIO therefore will engage with the insurance sector to assess how the sector may help achieve national climate-related goals, including mitigation, adaptation, and transition to a lower carbon economy. This could include insurance sector consideration of underwriting activities, investment holdings, and business operations to support a low emissions economy.³⁰ It also could encompass insurance sector transition of its operational and attributable greenhouse gas (GHG) emissions.³¹ In addition, FIO plans to

³⁰ See, e.g., U.N. Environment Programme Finance Initiative, “The Net Zero Insurance Alliance, Statement of Commitment by Signatory Companies” (July 2021), 1 n. 1, <https://www.unepfi.org/psi/wp-content/uploads/2021/07/NZIA-Commitment.pdf>.

³¹ GHG includes Scope 1, 2, and 3 emissions. Scope 1 emissions are direct GHG emissions that occur from sources controlled or owned by an entity (such as an insurer). Scope 2 emissions are indirect GHG emissions associated with purchase of electricity, steam, heat, or cooling by an entity. Scope 3 emissions are all other indirect GHG emissions not covered by Scope 2 and where an entity may impact in the value chain, such as business travel and investments. For insurers, Scope 3 emissions would include the Scope 1, 2, and 3 emissions by policyholders when

consider ways to address the lack of common methodology and standardization in measuring financed emissions, particularly those of non-public companies in which the insurance sector underwrites and invests. Currently, only one state has passed legislation that is intended to leverage the insurance sector's ability to affect GHG emissions.³²

I. Request for Comments

Below, FIO invites public comments on a series of questions. The responses to this RFI will help inform FIO's assessment of the implications of climate-related financial risks for the insurance sector. It also will help FIO better understand (1) which data elements are necessary to accurately assess climate risk; (2) which data elements remain unavailable; and (3) how FIO could collect this data and make it available to stakeholders as needed. Access to high-quality, reliable, and consistent data will be necessary for accomplishing all three of FIO's initial climate-related priorities. FIO also will identify and issue recommendations on individual actions that can be taken by various insurance sector stakeholders (such as state insurance regulators, insurers, and policyholders) to address climate-related financial risks and facilitate the U.S. insurance sector's transition to a more sustainable future. FIO recognizes that an effective policy response to climate-related financial risk requires an iterative approach and intends to adjust its work and priorities as needed.

Executive Order on Climate-Related Financial Risk

1. Please provide your views on how FIO should assess and implement the action items set forth for FIO in the Executive Order on Climate-Related Financial Risk.³³

significant (and when data is available to determine them). *See, e.g.*, "Scope 1 and Scope 2 Inventory Guidance," U.S. Environmental Protection Agency (EPA), <https://www.epa.gov/climateleadership/scope-1-and-scope-2-inventory-guidance>; "Scope 3 Inventory Guidance," EPA, <https://www.epa.gov/climateleadership/scope-3-inventory-guidance>.

³² Claire Wilkinson, "Connecticut Bill Calls for Regulation of Insurers' Climate Risks," *Business Insurance*, June 17, 2021, <https://www.businessinsurance.com/article/20210617/NEWS06/912342605/Connecticut-bill-calls-for-regulation-of-insurers%E2%80%99-climate-risks>.

³³ Exec. Order No. 14,030 § 3(b)(i).

FIO's Initial Climate-Related Priorities

2. Please provide your views on FIO's three climate-related priorities and related activities, particularly with regard to whether there are alternative or additional priorities or activities that FIO should evaluate regarding the impact of climate change on the insurance sector and the sector's effect on mitigation and adaptation efforts.

Climate-Related Data and FIO's Data Collection and Data Dissemination Authorities

3. What specific types of data are needed to measure and effectively assess the insurance sector's exposures to climate-related financial risks? If data is not currently available, what are the key challenges in the collection of such climate-related data? In your response, please provide your views on the quality, consistency, comparability, granularity, and reliability of the available or needed data and associated data sources.

4. What are the key factors for the insurance sector in developing standardized, comparable, and consistent climate-related financial risk disclosures? In your response, please discuss whether a global approach for disclosure standards needs to be adopted domestically for insurers. Please also address the advantages and disadvantages of current proposals to standardize such disclosures, such as those set forth by the Task Force on Climate-Related Financial Disclosures or the NAIC's Insurer Climate Risk Disclosure Data Survey.

5. Please provide your views on how FIO's data collection and dissemination authorities should be used by FIO to research, monitor, assess, and publicize climate-related financial risk and other areas of the insurance markets that are affected by climate change.

6. What are the likely advantages and disadvantages of a verified, open-source, centralized database for climate-related information on the insurance sector? Please include in your response the types of information, if any, that may be most useful to disseminate through such a database and the key elements in the development and design of such a database.

Insurance Supervision and Regulation

7. How should FIO identify and assess climate-related issues or gaps in the supervision and regulation of insurers, including their potential impact on financial stability? In your response, please address insurance supervision and regulations concerning: (a) prudential concerns, (b) market conduct regarding insurance products and services, and (c) consumer protection. In addition, please discuss how FIO should assess the effectiveness of U.S. state insurance regulatory and supervisory policies in addressing and managing the climate-related financial risks with regard to the threat they may pose to U.S. financial stability, including identifying (1) the major channels through which climate-related physical, transition, and/or liability risks may impact the stability of the U.S. insurance market, and (2) the degree to which insurers' business models could be affected by each category of risk and the relevant time horizons for such effects.

8. Please identify the key structural issues that could inhibit the ability of insurance supervisors to assess and manage climate-related financial risk in the insurance sector (e.g., accounting frameworks, other standards). What barriers could inhibit the integration of climate-related financial risks into insurance regulation?

9. What approaches used by other jurisdictions or multi-national organizations should FIO evaluate that would help inform it about existing supervisory and regulatory issues and gaps concerning climate-related financial risks? Please describe these approaches, including their advantages and disadvantages, as well as available data sources on these approaches.

Insurance Markets and Mitigation/Resilience

10. What factors should FIO consider when identifying and assessing the potential for major disruptions of insurance coverage in U.S. markets that are particularly vulnerable to climate change impacts?

11. What markets are currently facing major disruptions due to climate change impacts?

What markets are likely to be at risk for major disruptions due to climate change impacts in the future? When discussing markets at risk for future disruption, please estimate the likely time horizons (e.g., 5, 10, 20, or more years) when these disruptions may occur.

12. Climate change is currently exacerbating economic losses caused by weather-related disasters and is projected to cause further damage in the future. Please provide information on the actions that insurers have taken in response to the threat of increased economic losses from climate-related disasters, including how insurers are incorporating mitigation and resilience considerations into their business operations, as well as what other strategies or solutions that insurers or U.S. regulators may want to explore that would help insurers mitigate the impact of climate change and build resilience.

13. To what extent, if any, are models (whether internal proprietary models, open-source models, or third-party vendor models) used in the underwriting process to consider the impact of climate change? How do these models affect pricing of insurance products and business decisions (e.g., level of catastrophe exposure, utilization of reinsurance)? What are the best practices for model validation?

14. How should FIO assess the availability and affordability of insurance coverage in U.S. markets that are particularly vulnerable to climate change impacts? In your response, please discuss how to balance maintaining insurer solvency with the need to address the availability and affordability of insurance products responsive to perils associated with climate-related risks, particularly for traditionally underserved communities and consumers, minorities, and low- and moderate-income persons.

15. In what areas have public-private partnerships or collaborations among state or local governments been effective in developing responses to climate change that may be taken by the insurance sector or insurance regulators? How can FIO evaluate the potential long-term or permanent effects on the insurance sector of such public-private partnerships or state and local

collaborations to address climate-related risks? How should FIO consider state insurance regulatory efforts on consumer education related to climate risks?

Insurance Sector Engagement

16. Please provide your views on additional ways that FIO should engage with the insurance sector on climate-related issues.

17. How should FIO assess the efforts of insurers, through their underwriting activities, investment holdings, and business operations to meet the United States' climate goals, including reaching net-zero emissions by 2050? For example, what steps should the insurance sector be taking to help improve transparency, comparability, and assessment of Scope 1, Scope 2, and, to the extent possible, Scope 3 GHG activities?

18. What role or actions might states take to encourage the insurance sector's transition to a low emissions environment and an adaptive and resilient economy? In your response, please discuss whether efforts by states to encourage the development of new insurance products, to promote sustainable investment and underwriting activities, and to address protection gaps created by climate-related financial risks might facilitate this transition.

General

19. Please provide any additional comments or information on other issues or topics that may be relevant to FIO's work on insurance and climate-related risks.

Steven E. Seitz,
Director, Federal Insurance Office.